Published online 2014 November 29.

Letter

# Health Related Quality of Life in Patients With High Blood Pressure in the Rural Areas of Golestan Province, Iran

# Hashem Heshmati <sup>1</sup>; Dorsa Maghsouldloo <sup>2,\*</sup>; Morteza Mansourian <sup>3</sup>

 $\frac{1}{2} Department of Public Health, Faculty of Health, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, IR Iran$ 

Received: May 29, 2014; Revised: July 22, 2014; Accepted: October 31, 2014

Keywords: High Blood Pressure; Health Related Quality; Adult

## Dear editor,

According to the global epidemic obesity and sedentary lifestyle, hypertension is one of the most common health problems, not only in the West but also in Asia. People with hypertension are at increased risk for developing diabetes and cardiovascular diseases, and the increased risk of mortality from the diseases (1). On the other hand, the subject of hypertension is very important and the motto of World Health Organization (WHO) in 2013 was dedicated to hypertension and the subject was highlighting the problem.

Iran, like other developing countries, is experiencing an epidemiological transition from communicable to non-communicable diseases. High blood pressure and its complications is a significant problem and cardiovascular diseases are the most common cause of death in Iran (2). Health-related quality of life (HRQL), representing people's subjective assessment of their sense of wellbeing and ability to perform social roles, is well accepted as a health indicator in medical interventions or health surveys. However, whether or not hypertension is associated with alterations in well-being and HRQL is a controversial issue. Mild-to-moderate hypertension is usually considered to be an asymptomatic condition. Some studies reported that hypertension was responsible for impairment in HRQL (1, 3) and other studies did with the subject of hypertension and HRQL in other populations (4,5), various studies investigated the effect of educational intervention on quality of life (6), association between health promoting lifestyle and quality of life (7), factors affecting quality of life (8), and the association between HRQL and other diseases such as Thalassemia (9), but there are not sufficient studies on Health related quality of life in patients with high blood pressure among the Iranian population. Therefore, according to the importance of the subject, the current study aimed to investigate the HRQL assessment in patients with high blood pressure in villages of Golestan province, Iran

It was a cross-sectional study based on descriptive analytical approach. A total of 316 patients with hypertension were selected by cluster sampling method, ten villages were selected according to their geographical and socio-economical status. Then samples were selected by census method on the basis of patients' records in the selected village. Data including the demographic and the quality of life questions were collected by a reliable and valid questionnaire via home interview. Validity of the questionnaire was approved by experts' viewpoints and reliability of the questionnaire was approved among the study population on the basis of Cronbach's alpha, and the alpha-coefficient was 0.84. Six months residence in the village was considered as the including criteria. Data were analyzed via SPSS software version15 by independent sample T-test, one way ANOVA and Pearson test.

Mean age of the population under study was 54.4  $\pm$ 13.08 year and 63% (n = 199) of them were male. Mean score of HRQL was  $91.90 \pm 14.27$ . Quality of life in 25.6% (n = 81) of the samples was in undesirable level, in 57% (n = 180) almost undesirable level, and in 17/4% (n = 55) of the samples had relatively desirable quality of life, but none of the samples was in desirable level Category. There was significant relationship between the quality of life and educational level (P < 0.001 F = 7.58), marital status (P < 0.001, F = 10.37), monthly family income (P < 0.001, F =5.58), job (P = 0.018, F = 2.75) and the time being afflicted (P = 0.023, F = 1.71); there was also significant positive correlation between HRQL and age (P < 0.001, r = 0.294), whereas there was no significant relationship between the quality of life and the number of children (P = 0.118, F = 1.66), gender (P = 0.463, T = 0.735) and ethnicity (P = 0.067, F = 2.73).

Copyright © 2014, Health Promotion Research Center. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/) which permits copy and redistribute the material just in noncommercial usages, provided the original work is properly cited.

<sup>&</sup>lt;sup>2</sup>Department of Public Health, Faculty of Health, Golestan University of Medical Sciences, Gorgan, IR Iran <sup>3</sup>Department of Public Health, Faculty of Health, Tehran University of Medical Sciences, Tehran, IR Iran

<sup>\*</sup>Corresponding author: Dorsa Maghsouldloo, Department of Public Health, Faculty of Health, Golestan University of Medical Sciences, Gorgan, IR Iran. Tel: +98-1732436103, Fax: +98-1732423630, E-mail: dorsa\_maghsoudloo@yahoo.com

Mean score of HRQL in people with hypertension the in current study was higher than that of the other studies in Iran (10). It seems that HRQL in people with hypertension in the rural areas is higher than those of the urban areas. The reason could be subject to the active cares in rural areas compared the passive cares in the urban areas; therefore, active cares should be done in the urban areas to promote HRQL in people with hypertension. HRQL in people that suffer from high blood pressure is not in a desirable level. Appropriate intervention is recommended, especially regarding education to promote the quality of life in people with high blood pressure.

### Acknowledgements

The authors would like to thank the Participants in the study.

#### **Authors' Contributions**

Study design: Dorsa Maghsoudloo, Hashem Heshmati and Morteza Mansourian. Data collection: Dorsa Maghsouldloo. Analysis and interpretation: Hashem Heshmat and drafting the manuscript: Hashem Heshmati.

#### **Funding/Support**

This study was supported by Goleatan University of Medical Sciences, Golestan, Iran.

#### References

- Wang R, Zhao Y, He X, Ma X, Yan X, Sun Y, et al. Impact of hypertension on health-related quality of life in a population-based study in Shanghai, China. Public Health. 2009;123(8):534–9.
- Hadi N, Rostami Gooran N. Determinant factors of medication compliance in hypertensive patients of Shiraz, Iran. Arch Iran Med. 2004;7(4):292-6.
- Bardage C, Isacson DG. Hypertension and health-related quality of life. an epidemiological study in Sweden. J Clin Epidemiol. 2001;54(2):172-81.
- 4. Zygmuntowicz M, Owczarek A, Elibol A, Chudek J. Comorbidities and the quality of life in hypertensive patients. *Pol Arch Med Wewn*. 2012;**122**(7-8):333–40.
- Saleem F, Hassali MA, Shafie AA, Atif M, Ul Haq N, Aljadhey H. Disease related knowledge and quality of life: a descriptive study focusing on hypertensive population in Pakistan. South Med Rev. 2012; 5(1):47-52.
- Nekouei ZK, Yousefy A, Manshaee G. Cognitive-behavioral therapy and quality of life: An experience among cardiac patients. J Educ Health Promot. 2012;1:2.
- 7. Tol A, Tavassoli E, Shariferad GR, Shojaeezadeh D. Health-promoting lifestyle and quality of life among undergraduate students at school of health, Isfahan university of medical sciences. *J Educ Health Promot.* 2013;2:11.
- 8. Norozi E, Mostafavi F, Hasanzadeh A, Moodi M, Sharifirad G. Factors affecting quality of life in postmenopausal women, Isfahan, 2011. J Educ Health Promot. 2013;2:58.
- Baghianimoghadam MH, Sharifirad G, Rahaei Z, Baghianimoghadam B, Heshmati H. Health related quality of life in children with thalassaemia assessed on the basis of SF-20 questionnaire in Yazd, Iran: a case-control study. Cent Eur J Public Health. 2011;19(3):165-9.
- Ebadi A, Shamsi A, Refahi AA, Saied Y. Comparison of the Quality of Life in Men with and Without Hypertension. Sci J Hamdan Nurs Midwifery Fac. 2012;20(1):5–13.